



Experience API (xAPI) Overview

Slides by Andy Johnson

Contractor with Problem Solutions, LLC in support of the ADL Initiative
I/ITSEC Plugfest
3 December 2014
Orlando, FL

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The Experience API...



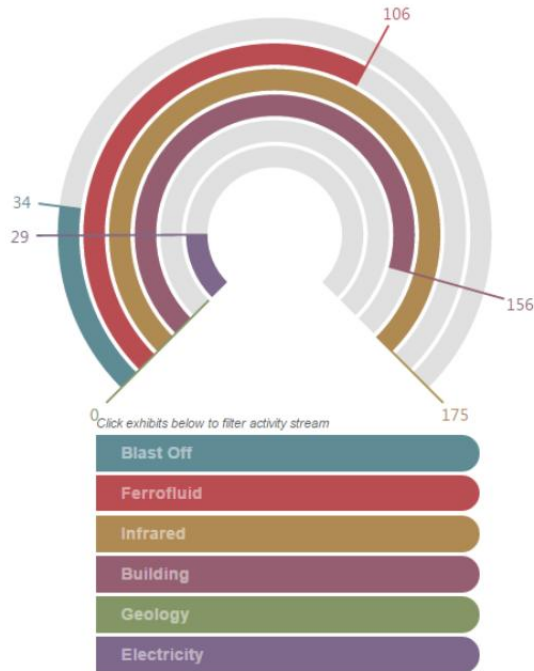
**Tracks experiences
(not just completions)**

The Experience API...

Dashboard from Torrance Learning's RFED project:
<http://www.torrancelearning.com/rfed/dashboard/index.html>

EXHIBIT ACTIVITY

Total number of interactions per exhibit



USER ACTIVITY

Total number of interactions per user

USER DETAIL (ACTIVITY STREAM)

AUTO-REFRESH ON OFF

Filter results:



Museum Guest answered "Light waves that objects reflect based on temperature" on **Infrared Q1**
19 hours ago



Museum Guest answered "I don't see any evidence that the ferrofluid is magnetic" on **Ferrofluid Q2**
20 hours ago



Museum Guest answered "The fluid is attracted to the magnets" on **Ferrofluid Q1**
20 hours ago



Museum Guest answered "The liquid changes shape" on **Ferrofluid Q1**
a day ago



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**Allows for data storage and retrieval
(e.g., 3rd party reporting/analytics tools)**

The Experience API...

A scene from the ADL Virtual World Framework's 'Desert Village' world
<http://vwf.adlnet.gov>



Puts gaming, mobile and virtual worlds in play

The Experience API...



Developed by an open source community

Actor, Verb, Object

[actor] [verb] [object]

Nikolaus attended I/ITSEC

Nikolaus presented at I/ITSEC

Nikolaus read Steve Jobs biography

Nikolaus watched “iPhone 6 launch video”

Nikolaus attempted “The War of 1812, Part 1”

Nikolaus attempted “The War of 1812, Assessment”

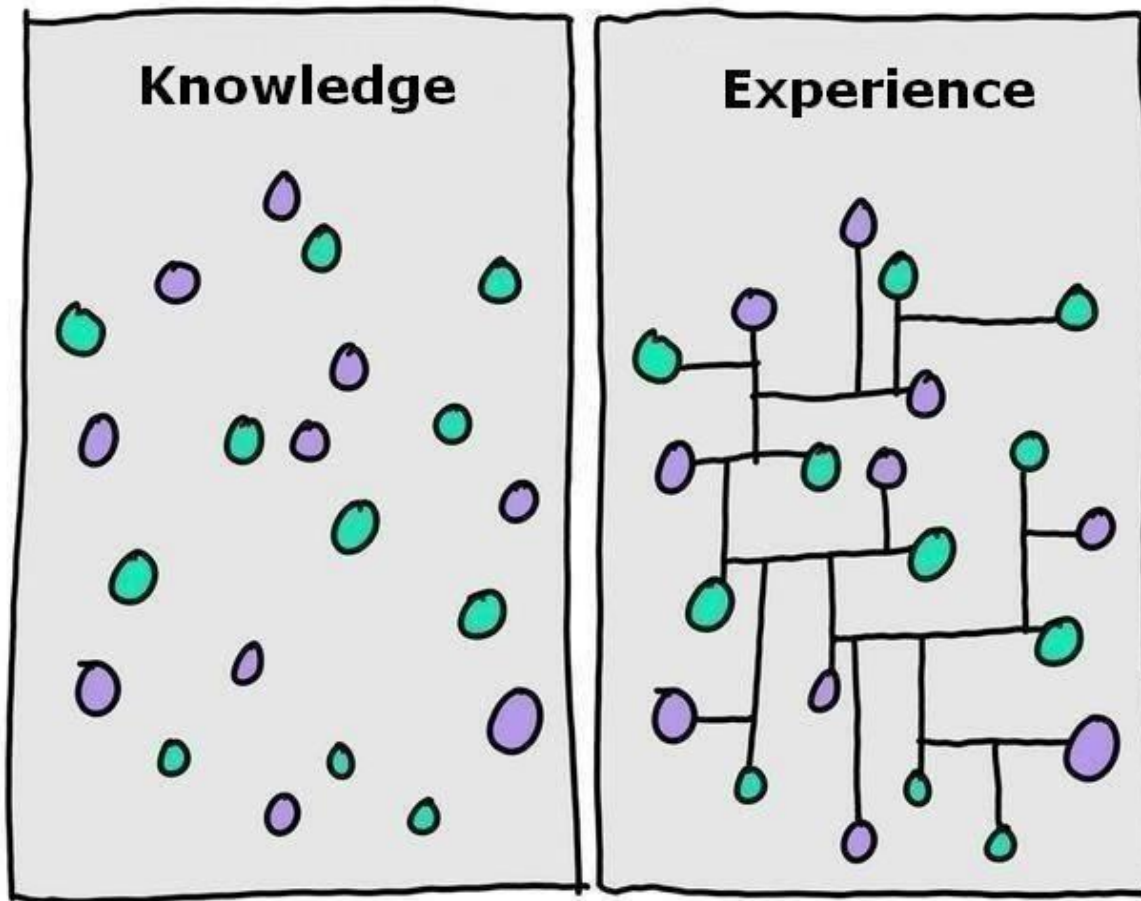
Nikolaus answered “Question 1” with “True”

Nikolaus scored “90%” on “The War of 1812, Assessment”

Nikolaus mastered objective “The War of 1812” to level “1”

Nikolaus earned “The War of 1812 – Level 1 Badge”

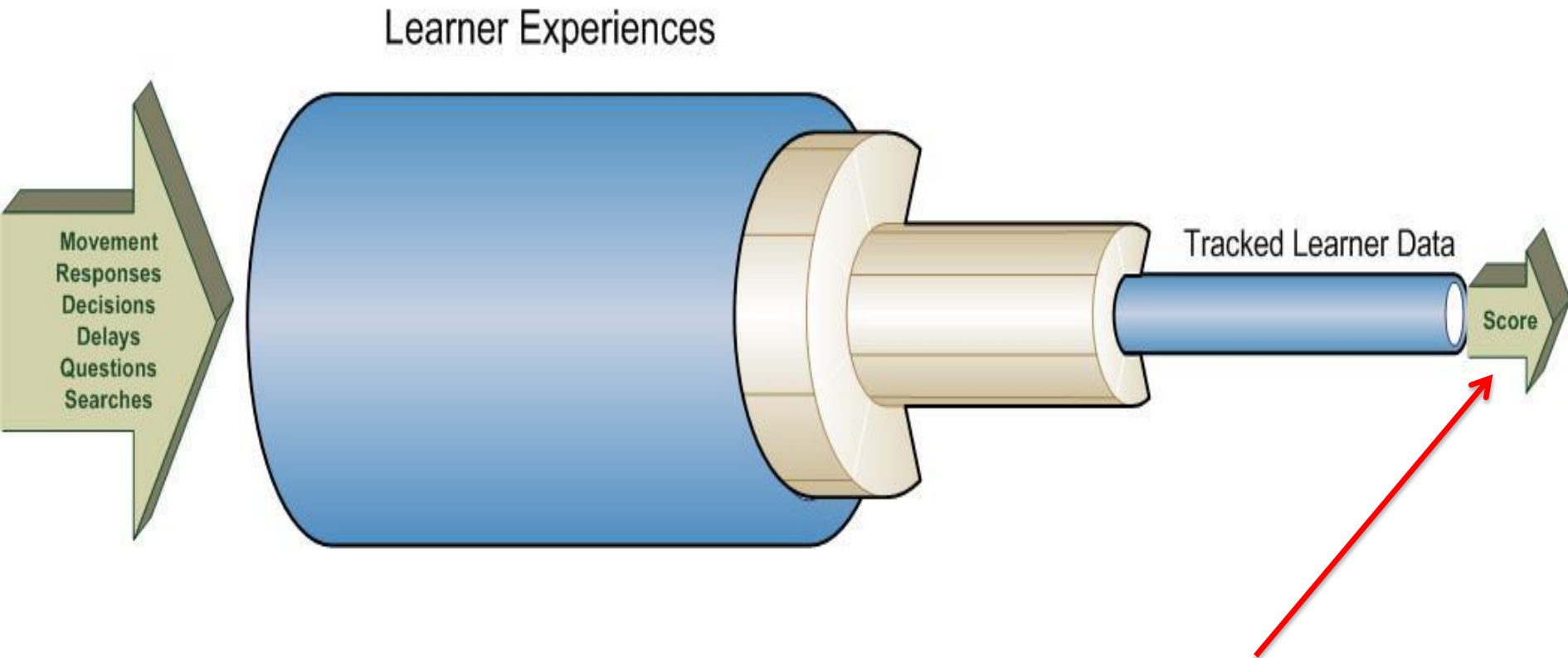
Experience = Growth



Reflection of experience is the best teacher.

– Michael Quinn Patton

Experience API doesn't force you to filter



This is a fraction of what could be considered.

Experience API exposes 'stuck data'



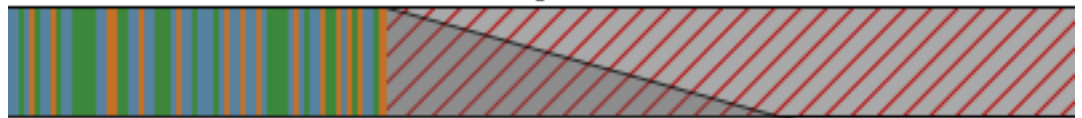
You get to drink from the firehose (if you want to)

Easier Data Visualizations

Raw xAPI statements



Separate relevant statements
from irrelevant



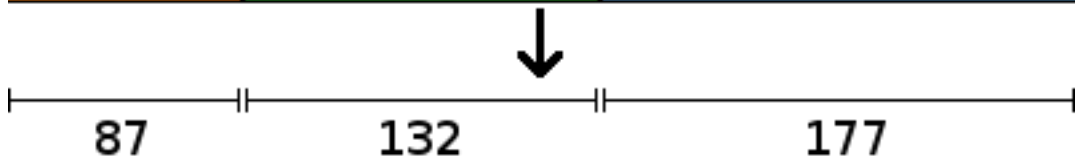
Throw out irrelevant statements



Gather like statements into
groups



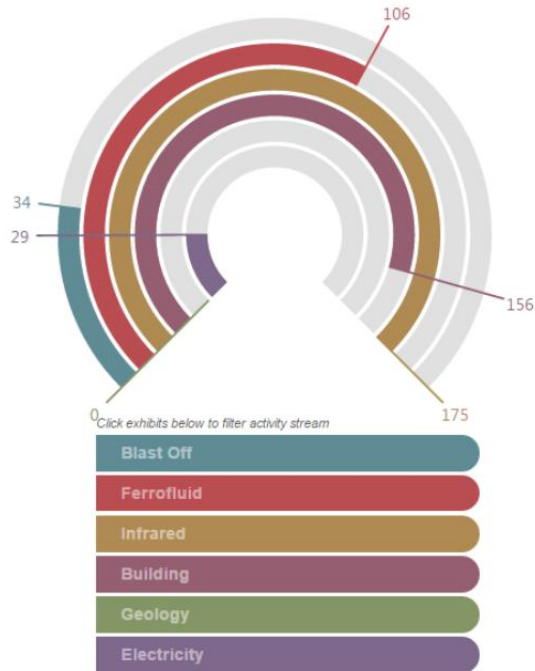
Aggregate each group into a
single meaningful value



Easier Data Visualizations

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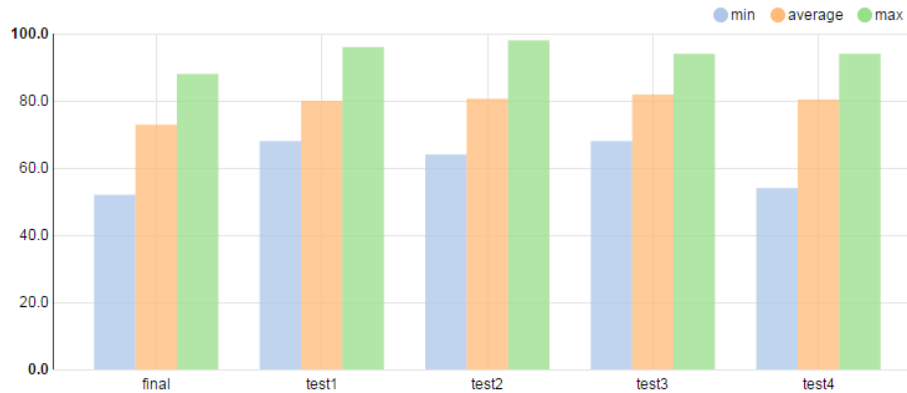
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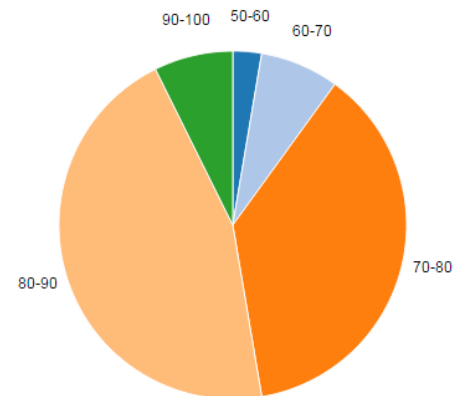
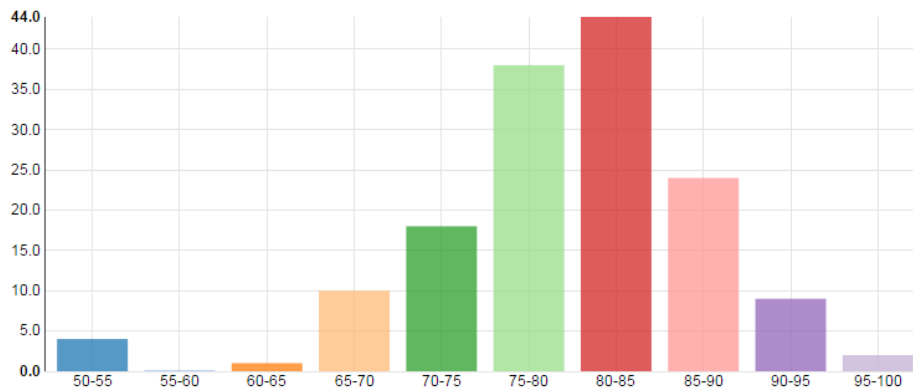
Easier Data Visualizations

Class Test Statistics



Class Scores For All Tests

(reset)





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@ADL_Initiative



@ADLmobile